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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/501,408	07/15/2004	Jean Noel Patry	120320	9561

7590 05/31/2005  
Oliff & Berridge  
PO Box 19928  
Alexandria, VA 22320

EXAMINER

JOHNSON, STEPHEN

ART UNIT	PAPER NUMBER
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3641

DATE MAILED: 05/31/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/501,408

Applicant(s)

PATRY ET AL.

Examiner

Stephen M. Johnson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 July 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 July 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 7/15/2004.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

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1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the reception means (claim 9) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 5-9 and 12 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant

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art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

In claim 5, the written description does not explain nor do the drawings illustrate how the calibrated sealing organ interacts with the hollow left trunnion as claimed.

4. Claims 5-9 and 12 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

In claim 5, the written description does not explain nor do the drawings illustrate how the calibrated sealing organ interacts with the hollow left trunnion as claimed to provide an enabling disclosure.

5. Claims 2-9 and 11-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 2, line 3, the term “cannon” should be (said cannon) if the previously claimed cannon is intended. In claim 7, line 3, the phrase “the ammunition cases” lacks an antecedent. In claim 11, line 3, the phrase “said right and left trunnions” lacks an antecedent. In claim 12, it is not understood as to what structural item is intended to be “integral with said sealing organ” nor how the current disclosure can be so described. In claim 13, line 2, use of the phrase “medium caliber” makes the claim indefinite as to what calibers are intended to be inclusive or exclusive of such terminology.

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6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-3 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zielinski in view of Ingestrand.

Zielinski discloses a turret comprising:

- |                              |      |
|------------------------------|------|
| a) an oscillating cannon;    | 4    |
| b) a turret;                 | 2, 3 |
| c) a linking interface;      | 10   |
| d) a caisson; and            | 5    |
| e) left and right trunnions. | 6    |

Zielinski applies as recited above. However, undisclosed is an air-tight linking interface. Ingestrand teaches an air-tight linking interface 5, 6 (col. 2, lines 23-32). Applicant is substituting one type of linking interface for another to provide air-tight sealing as is commonly known in this art. It would have been obvious to a person of ordinary skill in this art at the time of the invention to apply the teachings of Ingestrand to the Zielinski turret and have a turret with an air-tight linking interface.

8. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Zielinski in view of Ingestrand as applied to claims 1-3 and 13 above, and further in view of Siech et al..

Zielinski and Ingestrand apply as previously recited. However, undisclosed is a gun or

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cannon that is a 40 mm gun or cannon. Siech et al. teach a gun or cannon that is a 40 mm gun or cannon (col. 1, lines 40-42). Applicant is substituting one sized gun or cannon for another in an analogous art setting as explicitly encouraged by the secondary reference (see col. 1, lines 40-58 of Siech et al.). It would have been obvious to a person of ordinary skill in this art at the time of the invention to apply the teachings of Siech et al. to Zielinski in view of Ingestrand and have a cannon of a particular size.

9. Claims 4-5 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zielinski in view of Ingestrand as applied to claims 1-3 and 13 above, and further in view of Sanderson.

Zielinski and Ingestrand apply as previously recited. However, undisclosed is a hollow trunnion with associated bearings and seals. Sanderson teaches a hollow trunnion with associated bearings and seals (see fig. 9 and col. 10, lines 50-67). Applicant is substituting one trunnion arrangement for another in an analogous art setting. It would have been obvious to a person of ordinary skill in this art at the time of the invention to apply the teachings of Sanderson to the Zielinski in view of Ingestrand turret and have a turret with a particular trunnion arrangement.

10. Claims 6-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zielinski in view of Ingestrand and Sanderson as applied to claims 1-5, 11, and 13 above, and further in view of Flemming et al..

Zielinski, Ingestrand, and Sanderson apply as previously recited. However, undisclosed is air pressure no return valve. Flemming et al. teach an air pressure no return valve (see abstract). It would have been obvious to a person of ordinary skill in this art at the time of the invention to

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apply the teachings of Flemming et al. to the Ingestrand, Sanderson, and Zelinski disclosures and have a turret with an air pressure no return valve.

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

12. Claims 1-3 and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Koontz.

Koontz discloses a turret comprising:

- |                                    |            |
|------------------------------------|------------|
| a) an oscillating cannon;          | 16         |
| b) a turret;                       | see fig. 1 |
| c) an air-tight linking interface; | 10         |
| d) a caisson, and                  | see fig. 5 |
| e) left and right trunnions.       | 20         |

13. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Koontz in view of Flemming et al..

Koontz apply as previously recited. However, undisclosed is air pressure no return valve. Flemming et al. teach an air pressure no return valve and associated means for drawing air (see abstract). It would have been obvious to a person of ordinary skill in this art at the time of the invention to apply the teachings of Flemming et al. to the Koontz disclosure and have a turret with an air pressure no return valve and associated means for drawing air.

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14. Claims 8-9 and 12 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Tassie, De Meiss, Lanciani, Hurlemann et al., and Weinfurth et al. disclose other state of the art turret arrangements.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen M. Johnson whose telephone number is 571-272-6877. The examiner can normally be reached on Tuesday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Carone can be reached on 571-272-6873. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 800-786-9199.



**STEPHEN M. JOHNSON**  
**PRIMARY EXAMINER**

Stephen M. Johnson  
Primary Examiner  
Art Unit 3641

SMJ  
May 26, 2005